



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,509	03/11/2005	Matthias Marke	3717483.00063	1320
29177	7590	12/01/2009	EXAMINER	
K&L Gates LLP			TORRES, JOSEPH D	
P.O. BOX 1135			ART UNIT	
CHICAGO, IL 60690			PAPER NUMBER	
			2112	
			MAIL DATE	
			DELIVERY MODE	
			12/01/2009	
			PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,509	<b>Applicant(s)</b> MARKE ET AL.	
	<b>Examiner</b> Joseph D. Torres	<b>Art Unit</b> 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21 and 23-38 is/are pending in the application.
- 4a) Of the above claim(s) 36-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21 and 23-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Group I, claims 20 and 23-35, in the reply filed on 10/10/2007 is acknowledged.

Claims 36-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/10/2007.

### ***Response to Arguments***

Applicant's arguments filed 10/05/2009 have been fully considered but they are not persuasive.

The Applicant contends, "In addition, Brantingham fails to teach this claim element. The Office action states that the "Examiner introduces Brantingham as a teaching on disabling error concealment (col. 2, lines 17-20 in Brantingham teach that error concealment/interpolation is disabled for control data for voice data since concealment/interpolation doe[s] not provide useful information about control data for voice data)" (page 3, lines 8-11, emphasis added). Applicants respectfully disagree. The cited portion of Brantingham states: The interpolator also preferably includes means for disabling the interpolation in re[p]sonse to charges from voiced to unvoiced speech and visa versa, for instance. (emphasis added) Nothing in this portion, or any other portion

Art Unit: 2112

of Brantingham teaches "error concealment" let alone "disabling error concealment."

The interpolator of Brantingham reduces the data rate required by a speech synthesis circuit by interpolating data. In other words, Brantingham teaches the insertion of voice frames with or without errors occurring. This is not "error concealment." Error concealment is the replacement of a voice frame (possibly interpolated) when an error occurs."

That is incorrect. Haimi-Cohen teaches that error concealment operations are not valid for Baudot-encoded text and that error concealment operations/data is ignored for Baudot-encoded text. Brantingham teaches that when operations, i.e., interpolation operations, are not valid for a particular type of data that the operations are disabled. It is blatantly obvious to combine Brantingham with Haimi-Cohen to avoid operations that are not valid for the Baudot-encoded text in Haimi-Cohen.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 2112

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 20, 23-27, 31, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimi-Cohen; R. (US 6606722 B1) in view of Kutner; Michael A. et al. (US 5142537 A, hereafter referred to as Kutner).

35 U.S.C. 103(a) rejection of claim 20.

Haimi-Cohen teaches sending a text/voice indicator from a cellular text telephone modem to a voice decoder of a communication terminal receiver (col. 1, lines 40-42 teaches that Figures 1 and 3 in Haimi-Cohen provide reversed CRC to indicate Baudot-encoded text telephony signals for communication between a cellular phone sending and receiving terminals; Figure 3 is a voice decoder of a communication terminal receiver), and suppressing an error concealment in the voice decoder if the text/voice indicator indicates that the data is cellular text telephone modem text data (col. 6, lines 9-15 in Haimi-Cohen teaches that Prior Art speech decoders do not distinguish Baudot-encoded text telephony signals from speech signals; col. 6, lines 15-55 in Haimi-Cohen teaches that the Speech Decoder of Figure 3 distinguishes from the Prior Art in the use Baudot-encoded text reversed CRC indicator allowing for the suppression of error concealment in the voice decoder by providing a bypass mechanism for Baudot-encoded text). Note: since error concealment for Baudot-encoded text is useless, Haimi-Cohen teaches that error concealment applied to any Baudot-encoded text is

Art Unit: 2112

ignored, that is the error concealment applied to any Baudot-encoded text is disabled from released form the speech decoder.

Haimi-Cohen substantially teaches disabling a devices operation, i.e., error concealment in the voice decoder, if the text/voice indicator indicates that the data is cellular text telephone modem text data, i.e., error concealment is not a viable solution for errors, by suppressing an error concealment in the voice decoder if the text/voice indicator indicates that the data is cellular text telephone modem text data (col. 6, lines 9-15 in Haimi-Cohen teaches that Prior Art speech decoders do not distinguish Baudot-encoded text telephony signals from speech signals; col. 6, lines 15-55 in Haimi-Cohen teaches that the Speech Decoder of Figure 3 distinguishes from the Prior Art in the use Baudot-encoded text reversed CRC indicator allowing for the suppression of error concealment in the voice decoder by providing a bypass mechanism for Baudot-encoded text), but does not include a disable feature for concealment when concealment is no longer operationally functional, but instead includes a suppression feature whereby interpolation data generated by Speech decoder 306 is ignored and is not processed. Note: error concealment data is useless data when data is cellular text telephone modem text data.

However Haimi-Cohen does not explicitly teach the specific use of disabling error concealment when error concealment is not operationally functional.

Kutner, in an analogous art, teaches use of disabling error concealment when error concealment is not operationally function (col. 44, lines 55-57 in Kutner).

Art Unit: 2112

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haimi-Cohen with the teachings of Kutner by including use of disabling error concealment when error concealment is not operationally function. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of disabling error concealment when error concealment is not operationally functional would have provided a means for ignoring error concealment after a maximum error concealment value was exceeded for an area and error concealment was no longer valid.

35 U.S.C. 102(b) rejection of claim 23.

Figure 1 in Haimi-Cohen teaches that CRC error correction code is modified by reversing.

35 U.S.C. 102(b) rejection of claim 24.

Col. 1, lines 40-42; and Figures 1 and 3 in Haimi-Cohen.

35 U.S.C. 102(b) rejection of claim 25.

Col. 1, lines 40-42; and Figures 1 and 3 in Haimi-Cohen.

35 U.S.C. 102(b) rejection of claim 26.

Art Unit: 2112

Figures 1 and 3 in Haimi-Cohen teach that if a subsequent received frame is a voice frame CRC is used as an indicator for voice.

35 U.S.C. 102(b) rejection of claim 27.

Figure 1 in Haimi-Cohen provides an adaptive data rate for TTY text transmission embedded in voice transmissions, the data rate determined by the amount of TTY embedded in a block of length B of speech.

35 U.S.C. 102(b) rejection of claim 31 and 32.

Positions in the data frame for CRC error correction redundancy are unused TTY text positions.

35 U.S.C. 102(e)/103(a) rejection of claim 35.

Abstract in Haimi-Cohen.

Claims 20, 23-27, 31, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimi-Cohen; R. (US 6606722 B1) in view of Brantingham; George L. (US 4189779 A).

35 U.S.C. 103(a) rejection of claim 20.

Haimi-Cohen teaches sending a text/voice indicator from a cellular text telephone modem to a voice decoder of a communication terminal receiver (col. 1, lines 40-42



Art Unit: 2112

teaches that Figures 1 and 3 in Haimi-Cohen provide reversed CRC to indicate Baudot-encoded text telephony signals for communication between a cellular phone sending and receiving terminals; Figure 3 is a voice decoder of a communication terminal receiver), and suppressing an error concealment in the voice decoder if the text/voice indicator indicates that the data is cellular text telephone modem text data (col. 6, lines 9-15 in Haimi-Cohen teaches that Prior Art speech decoders do not distinguish Baudot-encoded text telephony signals from speech signals; col. 6, lines 15-55 in Haimi-Cohen teaches that the Speech Decoder of Figure 3 distinguishes from the Prior Art in the use Baudot-encoded text reversed CRC indicator allowing for the suppression of error concealment in the voice decoder by providing a bypass mechanism for Baudot-encoded text). Note: since error concealment for Baudot-encoded text is useless, Haimi-Cohen teaches that error concealment applied to any Baudot-encoded text is ignored, that is the error concealment applied to any Baudot-encoded text is disabled from released form the speech decoder.

Haimi-Cohen substantially teaches disabling a devices operation, i.e., error concealment in the voice decoder, if the text/voice indicator indicates that the data is cellular text telephone modem text data, i.e., error concealment is not a viable solution for errors, by suppressing an error concealment in the voice decoder if the text/voice indicator indicates that the data is cellular text telephone modem text data (col. 6, lines 9-15 in Haimi-Cohen teaches that Prior Art speech decoders do not distinguish Baudot-encoded text telephony signals from speech signals; col. 6, lines 15-55 in Haimi-Cohen teaches that the Speech Decoder of Figure 3 distinguishes from the Prior Art in the use

Art Unit: 2112

Baudot-encoded text reversed CRC indicator allowing for the suppression of error concealment in the voice decoder by providing a bypass mechanism for Baudot-encoded text), but does not include a disable feature for concealment when concealment is no longer operationally functional, but instead includes a suppression feature whereby interpolation data generated by Speech decoder 306 is ignored and is not processed. Note: error concealment data is useless data when data is cellular text telephone modem text data.

However Haimi-Cohen does not explicitly teach the specific use of disabling a device when the device is not operationally functional.

Brantingham, in an analogous art, teaches use of disabling a device, interpolation (col. 2, lines 17-20 in Brantingham teach that interpolation is disabled for control data for voice data since interpolation does not provide useful information about control data for voice data, i.e., interpolation is not operationally functional for control data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haimi-Cohen with the teachings of Brantingham by including use of disabling a device when the device is not operationally functional. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of disabling a device when the device is not operationally functional would have provided an alternative means for preventing access to useless data (col. 2, lines 17-20 in Brantingham teach that error interpolation is disabled for control data for voice data

Art Unit: 2112

since interpolation does not provide useful information about control data for voice data).

35 U.S.C. 102(b) rejection of claim 23.

Figure 1 in Haimi-Cohen teaches that CRC error correction code is modified by reversing.

35 U.S.C. 102(b) rejection of claim 24.

Col. 1, lines 40-42; and Figures 1 and 3 in Haimi-Cohen.

35 U.S.C. 102(b) rejection of claim 25.

Col. 1, lines 40-42; and Figures 1 and 3 in Haimi-Cohen.

35 U.S.C. 102(b) rejection of claim 26.

Figures 1 and 3 in Haimi-Cohen teach that if a subsequent received frame is a voice frame CRC is used as an indicator for voice.

35 U.S.C. 102(b) rejection of claim 27.

Figure 1 in Haimi-Cohen provides an adaptive data rate for TTY text transmission embedded in voice transmissions, the data rate determined by the amount of TTY embedded in a block of length B of speech.

Art Unit: 2112

35 U.S.C. 102(b) rejection of claim 31 and 32.

Positions in the data frame for CRC error correction redundancy are unused TTY text positions.

35 U.S.C. 102(e)/103(a) rejection of claim 35.

Abstract in Haimi-Cohen.

Claims 28-30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimi-Cohen; R. (US 6606722 B1) and of Kutner; Michael A. et al. (US 5142537 A, hereafter referred to as Kutner) in view of Kobayashi; Hisashi et al. (US 6029264 A, hereafter referred to as Kobayashi).

35 U.S.C. 103(a) rejection of claims 28 and 29.

Haimi-Cohen and Kutner substantially teaches the claimed invention described in claim 20 (as rejected above).

However Haimi-Cohen and Kutner do not explicitly teach the specific use of additional information is added by the communication terminal receiver to the received data.

Kobayashi, in an analogous art, teaches additional information is added by the communication terminal receiver to the received data (Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders).

Art Unit: 2112

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haimi-Cohen and Kutner with the teachings of Kobayashi by including additional information is added by the communication terminal receiver to the received data. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that additional information is added by the communication terminal receiver to the received data would have provided Improved error correction performance (col. 4, lines 22-25 in Kobayashi).

35 U.S.C. 103(a) rejection of claim 30.

Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders. Erasures indicate that the frame having an erasure is corrupted.

35 U.S.C. 103(a) rejection of claim 33 and 34.

Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders. Erasures are an indication of noise in the communication channel.

Claims 28-30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimi-Cohen; R. (US 6606722 B1) and Brantingham; George L. (US

Art Unit: 2112

4189779 A) in view of Kobayashi; Hisashi et al. (US 6029264 A, hereafter referred to as Kobayashi).

35 U.S.C. 103(a) rejection of claims 28 and 29.

Haimi-Cohen and Brantingham substantially teaches the claimed invention described in claim 20 (as rejected above).

However Haimi-Cohen and Brantingham do not explicitly teach the specific use of additional information is added by the communication terminal receiver to the received data.

Kobayashi, in an analogous art, teaches additional information is added by the communication terminal receiver to the received data (Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haimi-Cohen and Brantingham with the teachings of Kobayashi by including additional information is added by the communication terminal receiver to the received data. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that additional information is added by the communication terminal receiver to the received data would have provided Improved error correction performance (col. 4, lines 22-25 in Kobayashi).

Art Unit: 2112

35 U.S.C. 103(a) rejection of claim 30.

Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders. Erasures indicate that the frame having an erasure is corrupted.

35 U.S.C. 103(a) rejection of claim 33 and 34.

Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders. Erasures are an indication of noise in the communication channel.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott T. Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2112

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph D Torres  
Primary Examiner  
Art Unit 2112

/Joseph D Torres/  
Primary Examiner, Art Unit 2112